Narrator:

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The U.S. government, through agencies like the Department of Commerce and the Environmental Protection Agency are responsible for carrying out research and supplying the best possible information to the president. The National Oceanic and Atmospheric Administration, called NOAA, is part of the Department of Commerce. NOAA is one of the lead agencies in the effort to understand climate change and its effects.

Direct observations of oceans, land surfaces, the atmosphere and glaciers have made it possible for scientists to state with more than 90 percent certainty that Earth's climate is warming and human activities are driving the change. The measurements come from a range of observation networks. These networks include devices such as weather balloons, ships, weather stations, satellites and ocean buoys across the planet, transmitting data to scientists around the globe.

NOAA, NASA, the U.S. Geological Survey, the Environmental Protection Agency, universities, international scientific institutions and others collect and analyze the data. They then feed the data into complex computer-based climate models that simulate climate trends on a global scale.

Making sense of the enormous amount of data that is collected is a challenge. Policymakers and scientists are working together to turn this raw environmental data into practical knowledge that city planners, water resource managers and other regional and local decision makers can use.

In Geneva, at the third World Climate Conference August 31st to September 4th, more than 2,000 delegates, climate scientists, policymakers and resource managers from more than 165 countries discussed for the first time the practical impacts of the latest scientific findings on climate change.

The World Meteorological Organization and international partners organized the conference to establish a way to deliver climate services to the people who need them. Weather services, like forecasts and storm warnings, cover days. Climate services, like drought warnings, cover seasons to decades and will help everyone adapt to climate variability and change.

In the United States, work is proceeding on a system of regional decision-support centers that could act as knowledge portals accessible to national, regional, local and private decisionmakers who deal with the effects of climate change. Such a national climate service would go beyond issuing warnings and give people a real understanding not only of what’s happening but what to do about it.

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